



THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Arvin Shmilovich) Art Unit: 3643
Serial No. 10/784,067) Examiner: Robert P. Swiatek
Filed: February 20, 2004) Cust. No. 22931
For: APPARATUS AND METHOD) Attorney
FOR THE CONTROL OF) Ref. No.: P114660
TRAILING WAKE FLOWS

MAIL STOP PETITIONS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Attention: Office of Petitions

PETITION TO DEFER ISSUANCE OF A PATENT

Applicant respectfully petitions to defer issuance of the above-referenced patent, serial number 10/784,067, filed on February 20, 2004, in accordance with the provisions of MPEP 1306.01 and of MPEP 1002.02(b). The reason for this petition is to give the applicant the opportunity to provide clarified figures on sheets 6-8 and 12-14 of the formal drawings. The drawings display the effect by the current invention in creating turbulent flow in the air vortex that is shed from the tips of the wings. This turbulent flow was properly presented in the original formal drawings that were accepted.

By way of background, applicant submitted a full set of formal drawings and the application was approved for issuance. The applicant's attorney has just now found out on January 6 that the figures on pages 6-8 and 12-14 in the formal drawings were not legible after processing by the Patent Office. This is believed to be due to the fact that there was a gray background on these figures which turned out to be black after the processing.

These figures are displayed on six sheets. Please see copies of the attached

01/11/2006 HDAMYE1 00000121 083260 10784067

1

01 FC:1464 130.00 DA

BEST AVAILABLE COPY

sheets and figures: Sheet 6, Fig. 10A; Sheet 7, Fig. 10B; Sheet 8, Fig. 10C; Sheet 12, Fig. 12A; Sheet 13, Fig. 12B; and Sheet 14, Fig. 12C.

The attached six sheets in question show where the gray background has subsequently obliterated the line art shown in those figures in the formal drawings that were sent to the Office.

No new matter is being added to the application as filed only clarification of the obliterated figures to show the proper line art that had been originally submitted.

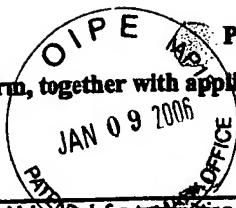
Accordingly, to facilitate consideration of this Petition for Deferment of Issue, the petition is attached to the Issue Fee Transmittal Form showing payment of the issue fee. Applicant authorizes payment of the petition fee under 37 CFR 1.17(h) charged to deposit account number 08-3260.

If there is any matter which could be expedited by consultation with the Applicant's attorney, such would be welcome. The Applicant's undersigned attorney can normally be reached at the telephone number set forth below.

Signed at Bellingham, County of Whatcom, State of Washington this January 06, 2006.

Respectfully submitted,
ARVIN SHMILOVICH,

By Robert B. Hughes
Robert B. Hughes, Reg. No. 19, 304
Hughes Law Firm, PLLC
Pacific Meridian Plaza
4164 Meridian Street, Suite 302
Bellingham, WA 98226
(360) 647-1296
Fax (360) 671-2489



PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail****Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571) 273-2885**

INSTRUCTIONS: This form should be used for depositing the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

22931 7590 03/25/2005

HUGHES LAW FIRM, PLLC
PACIFIC MERIDIAN PLAZA, SUITE 302
4164 MERIDIAN STREET
BELLINGHAM, WA 98226-5583

Note: A certificate of mailing can only be used for domestic mailings of Fee(s) Transmittal. This certificate cannot be used for any other accompany papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Marie Tiemersma	(Depositor's name)
<i>Marie Tiemersma</i>	(Signature)
November 17, 2005	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,067	02/20/2004	Arvin Shmilovich	P114660	2609

TITLE OF INVENTION: APPARATUS AND METHOD FOR THE CONTROL OF TRAILING WAKE FLOWS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	11/25/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
SWIATEK, ROBERT P	3643	244-199000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1. Robert B. Hughes
2. Hughes Law Firm, PLLC
3. _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE
THE BOEING COMPANY

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)
15460 LAGUNA CANYON ROAD
IRVINE, CA 92618
USA

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☒ Advance Order - # of Copies ten

4b. Payment of Fee(s):

- ☒ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), or credit any overpayment Deposit Account Number 08-3280 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.
NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other part interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

Date November 17, 2005

Typed or printed name

Robert B. HughesRegistration No. 19,304

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 14 Alexandria, Virginia 22313-1450.

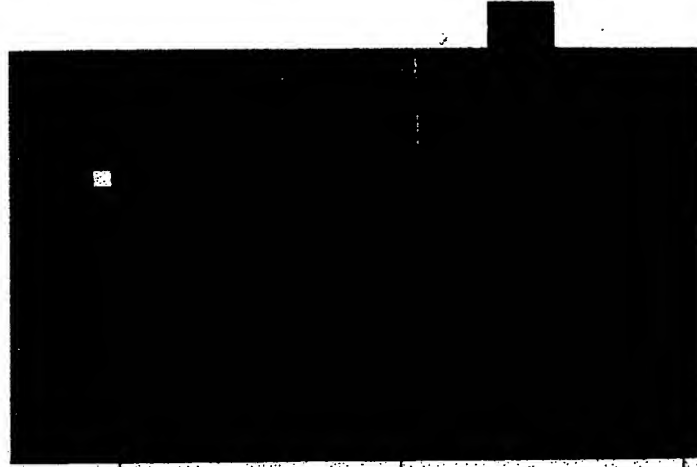
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



6/18

After activation

AFC at 10.7 H_2



Before activation

Iso-surface marks the
core of the vortex

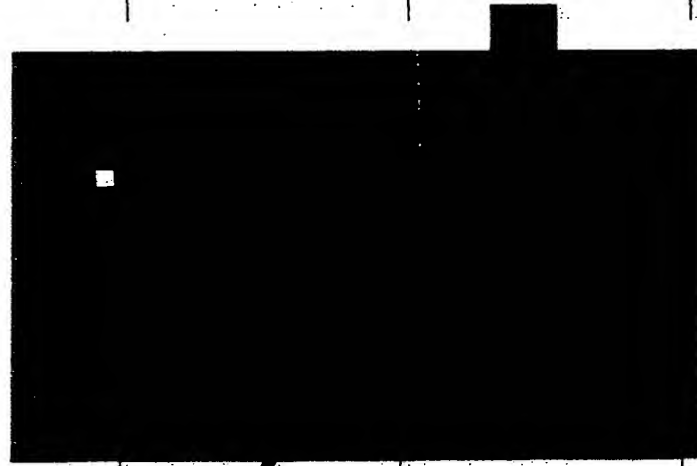


Figure 10A

Before activation

After activation

AFC at 10.7 Hz

Vortex core

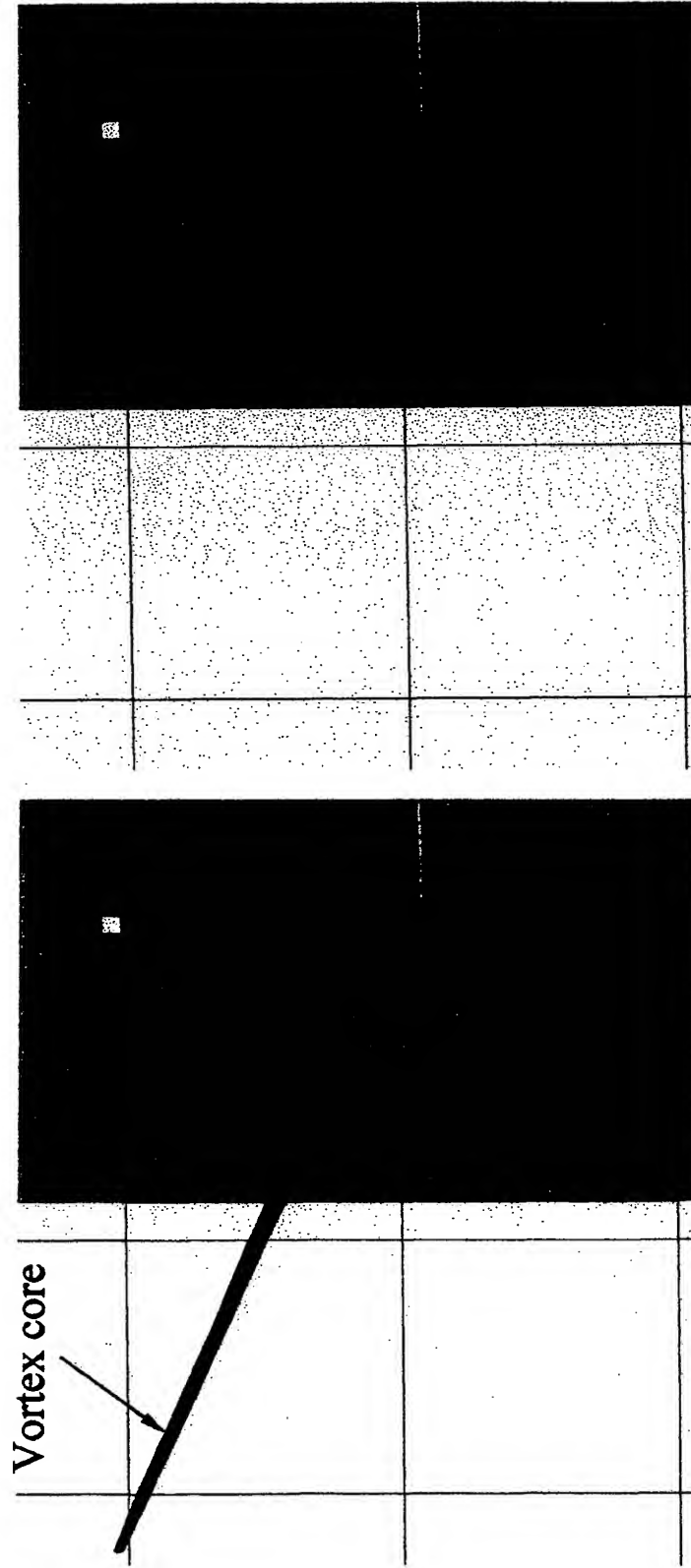


Figure 10B

8/18

After activation

AFC at 10.7 Hz

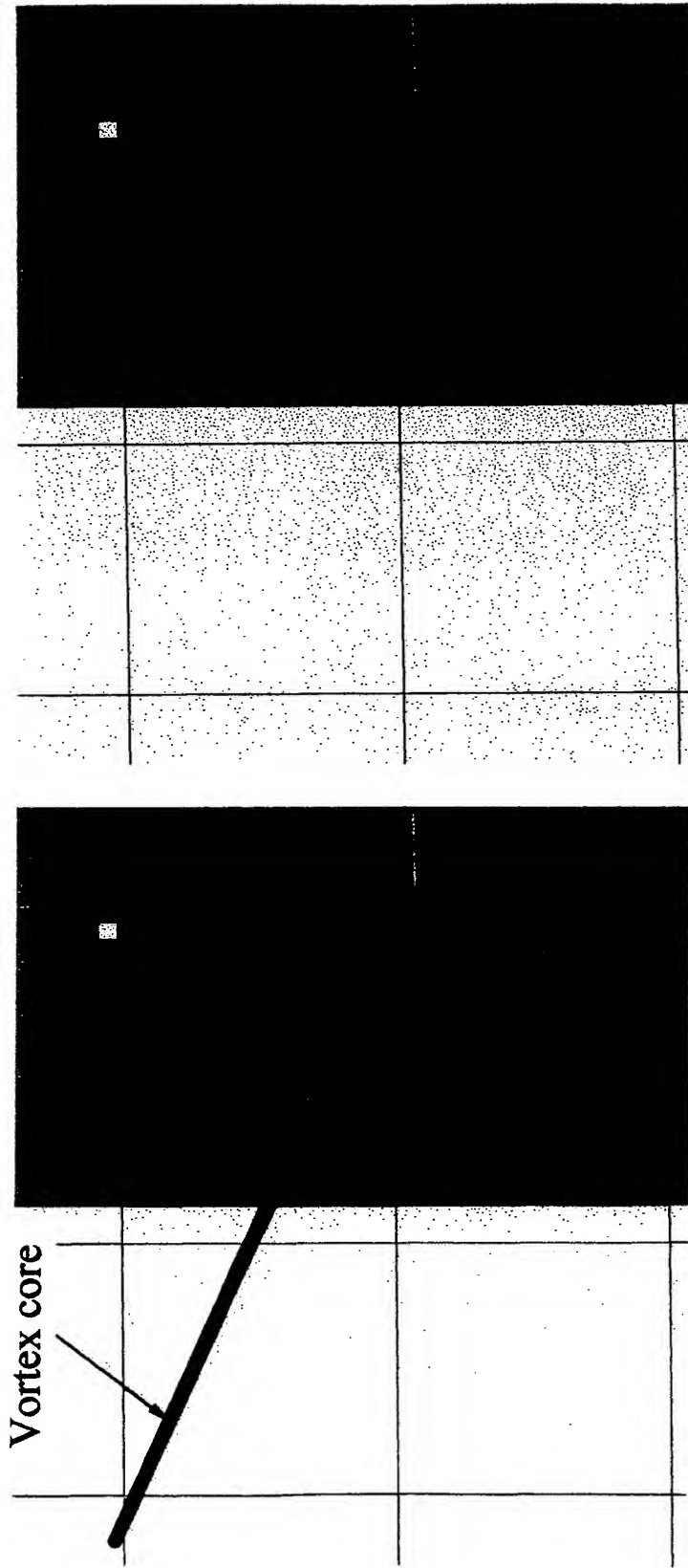
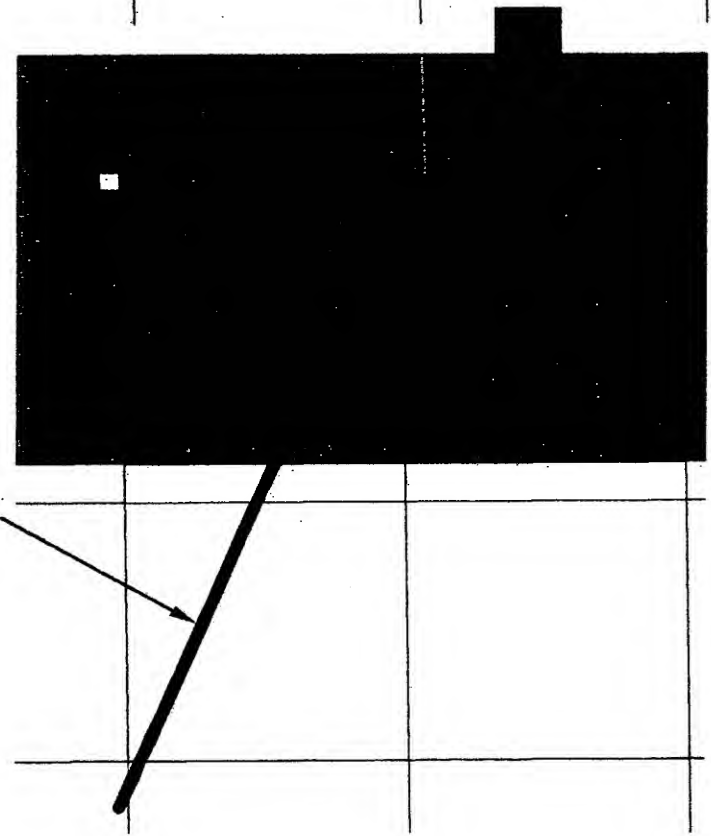


Figure 10c

Before activation

Iso-surface marks the
core of the vortex



After activation

AFC at 1.07 H_z

Instantaneous
vortical blobs

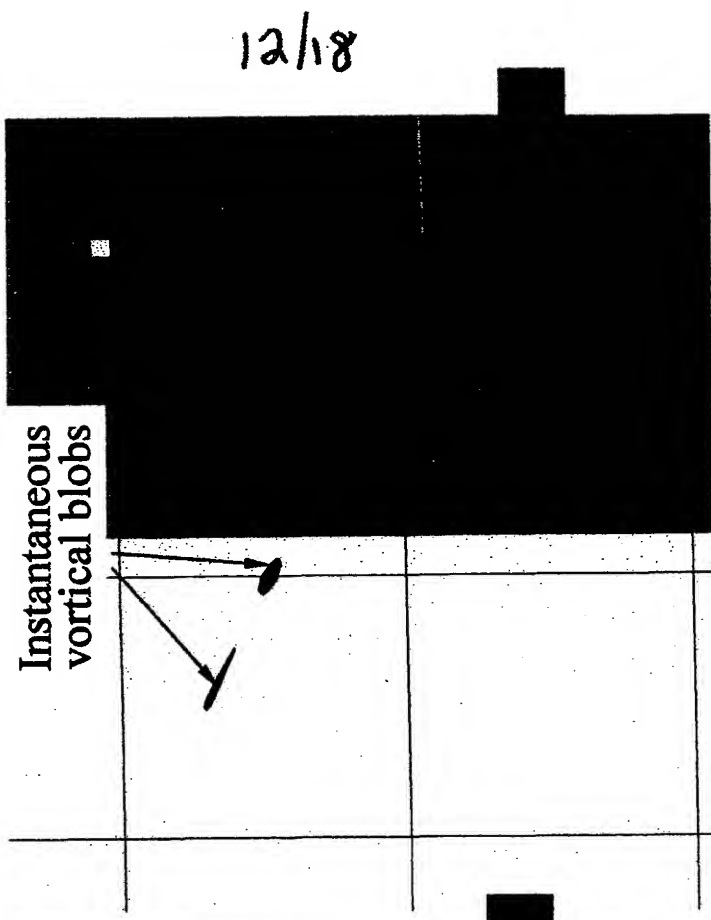


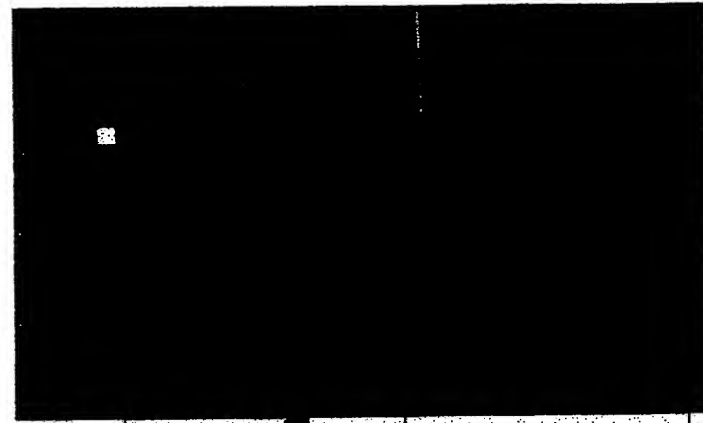
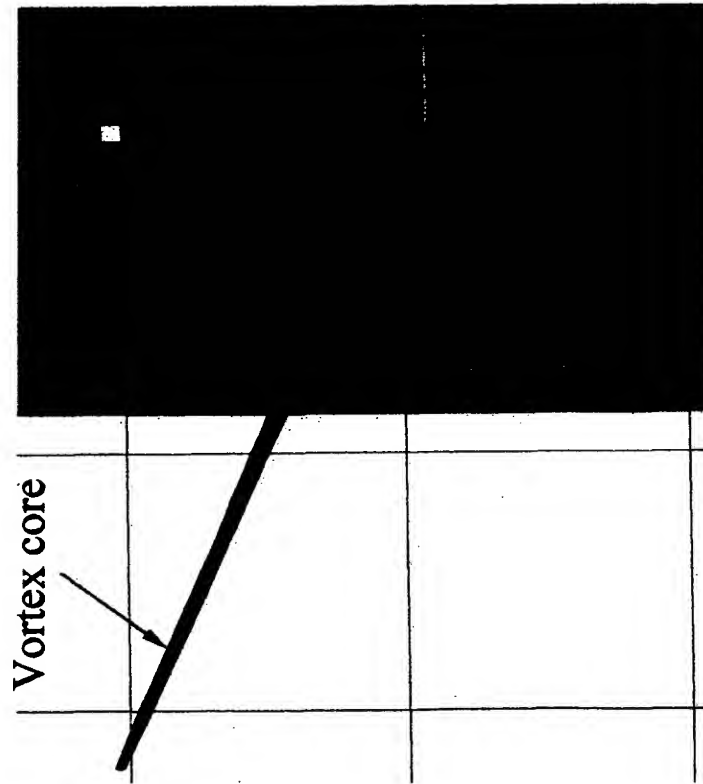
Figure 12A

Before activation

After activation

AFC at $1.07 H_z$

Vortex core



13/18

Figure 12B

Before activation

After activation

AFC at 1.07 Hz

Vortex core

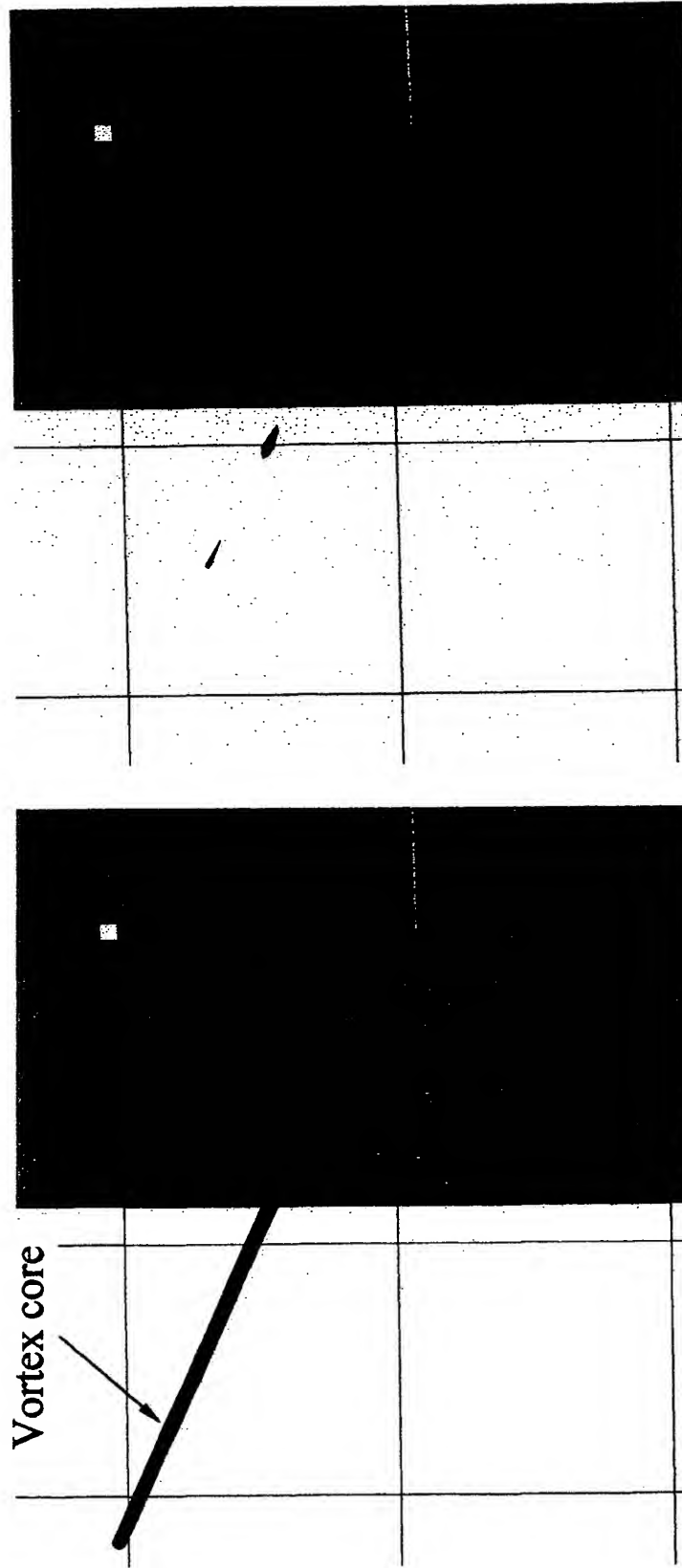


Figure 12c

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☒ **BLACK BORDERS**

☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**

☐ **FADED TEXT OR DRAWING**

☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**

☐ **SKEWED/SLANTED IMAGES**

☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**

☐ **GRAY SCALE DOCUMENTS**

☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**

☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**

☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.